

| Parameter | Units | Effluent Limitations |                |               |                       |                       | Basis <sup>1</sup> |
|-----------|-------|----------------------|----------------|---------------|-----------------------|-----------------------|--------------------|
|           |       | Average Monthly      | Average Weekly | Maximum Daily | Instantaneous Minimum | Instantaneous Maximum |                    |

1. DC – Based on the design capacity of the Facility.  
CFR – Based on secondary treatment standards contained in 40 CFR part 133.  
BP – Based on water quality objectives contained in the Basin Plan.  
CTR – Based on water quality criteria contained in the California Toxics Rule and applied as specified in the SIP.  
NAWQC – Based on USEPA's National Ambient Water Quality Criteria for the protection of freshwater aquatic life.
2. Based on design flow of 1.5 MGD.

**E. Interim Effluent Limitations – Not Applicable**

**F. Land Discharge Specifications**

1. The Land Discharge Specifications are necessary to protect the beneficial uses of the groundwater and have been retained from Order R5-2004-0104-01 for dischargers to the DLDA.
2. For nutrients such as nitrate, the potential for degradation to groundwater not only depends on the quality of treated effluent, but the ability of the vadose zone below the DLDA spray fields to provide an environment conducive to denitrification to convert the effluent to nitrate and the nitrate to nitrogen gas prior to effluent reaching the water table.

The discharge to the spray fields has the potential to degrade groundwater with respect to nitrate. The water balance submitted to the Central Valley Water Board in March 2018 indicates an annual outfall potential of 32 MG of wastewater discharged to the spray fields in the DLDA. Based on an average total nitrogen concentration of 16 mg/L (December 2010 – April 2013), approximately 130 pounds per acre per year will be applied to the spray fields in the DLDA. The nutrient uptake rate for oak trees is unknown, however, grasses have a nutrient uptake rate of approximately 300 lb/ac/yr. Therefore, the current effluent nitrogen application rates are consistent with the vegetation grown, and represent best practical treatment and control. This Order sets a performance-based annual average land discharge total nitrogen limit of 34 mg/L to protect groundwater quality from the possible over application of nutrients.

**G. Recycling Specifications – Not Applicable**

**V. RATIONALE FOR RECEIVING WATER LIMITATIONS**

**A. Surface Water**

1. CWA section 303(a-c), requires states to adopt water quality standards, including criteria where they are necessary to protect beneficial uses. The Central Valley Water Board adopted water quality criteria as water quality objectives in the Basin Plan. The Basin Plan states that “[t]he numerical and narrative water quality objectives define the least stringent standards that the Regional Water Board will apply to regional waters in order to protect the beneficial uses.” The Basin Plan includes numeric and narrative water quality objectives for various beneficial uses and water bodies. This Order contains receiving surface water limitations based on the Basin Plan numerical and narrative water quality objectives for ammonia, bacteria, biostimulatory substances, color, chemical constituents, dissolved oxygen, floating material, oil and grease, pH, pesticides, radioactivity, suspended sediment, settleable substances, suspended material, tastes and odors, temperature, toxicity, and turbidity.

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## B. Groundwater

1. The beneficial uses of the underlying groundwater are municipal and domestic supply, industrial service supply, industrial process supply, and agricultural supply.
2. Basin Plan water quality objectives include narrative objectives for chemical constituents, tastes and odors, and toxicity of groundwater. The toxicity objective requires that groundwater be maintained free of toxic substances in concentrations that produce detrimental physiological responses in humans, plants, animals, or aquatic life. The chemical constituent objective states groundwater shall not contain chemical constituents in concentrations that adversely affect any beneficial use. The tastes and odors objective prohibits taste- or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses. The Basin Plan also establishes numerical water quality objectives for chemical constituents and radioactivity in groundwaters designated as municipal supply. These include, at a minimum, compliance with MCLs in Title 22 of the CCR. The bacteria objective prohibits coliform organisms at or above 2.2 MPN/100 mL. The Basin Plan requires the application of the most stringent objective necessary to ensure that waters do not contain chemical constituents, toxic substances, radionuclides, taste- or odor-producing substances, or bacteria in concentrations that adversely affect municipal or domestic supply, agricultural supply, industrial supply or some other beneficial use.
3. Total dissolved solids, which were found to be present in the wastewater at an average concentration of 400 mg/L, have the potential to degrade groundwater quality at this site because there is little ability for attenuation in the shallow permeable vadose zone beneath this Facility. According to Ayers and Westcot, dissolved solids can cause yield or vegetative growth reductions of sensitive crops if present in excess of 450 mg/L in irrigation water, thereby impairing agricultural use of the water resource. The applicable water quality objective to protect the agricultural use from discharges of total dissolved solids is the narrative Chemical Constituents objective, which is applied following the "Policy of Application of Water Quality Objectives" in the Basin Plan. A numerical groundwater limitation of 450 mg/L for total dissolved solids, based on Ayers and Westcot, is appropriate to apply the narrative Chemical Constituents objective to protect the unrestricted agricultural use of groundwater in the absence of information to support a less protective limit.
4. Nitrate, which was found to be present in the wastewater at an average concentration of up to 35 mg/L as nitrogen (as sampled between February 2012 and April 2014), has the potential to degrade groundwater quality because there is little ability for attenuation in the shallow permeable vadose zone beneath the Facility. Furthermore, groundwater monitoring data show nitrate concentrations above the primary MCL of 10 mg/L in monitoring wells MW-3 and MW-5. The Chemical Constituents objective prohibits concentrations of chemical constituents in excess of California MCLs in groundwater that is designated as municipal or domestic supply. The California primary MCL for nitrate is equivalent to 10 mg/L as nitrogen, and groundwater beneath the facility is designated as municipal or domestic supply. It is therefore appropriate to adopt a numerical groundwater limitation of 10 mg/L for nitrate as nitrogen to implement the Chemical Constituents objective to protect the municipal and domestic use of groundwater.
5. pH, which ranged 6.6 to 8.0 standard units in the domestic wastewater, has the ability to degrade groundwater quality at this site because there is little potential for buffering in the shallow permeable vadose zone. According to Ayers and Westcot, pH less than 6.5 or greater than 8.4 can cause yield or vegetative growth reductions of sensitive crops if present in irrigation water, thereby impairing agricultural use of the water resource. The

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applicable water quality objective to protect the agricultural use from discharges of substances that affect pH is the narrative Chemical Constituents objective, which is applied following the "Policy of Application of Water Quality Objectives" in the Basin Plan. A numerical groundwater limitation range of 6.5 to 8.4 for pH, based on Ayers and Westcot, is relevant and appropriate to apply the narrative Chemical Constituents objective to protect unrestricted agricultural use of groundwater in the absence of information to support a less protective limit.

6. Ammonia has the potential to degrade groundwater quality because there is little ability for ammonia attenuation in the shallow permeable vadose zone at this site. According to Amoores and Hautala<sup>14</sup>, who evaluated odor of ammonia in water, the odor threshold for ammonia in water is 1.5 mg/L (as NH<sub>4</sub>). These authors studied the concentration of chemicals in air that caused adverse odors and then calculated the concentration in water that would be equivalent to that amount in air. Therefore, it is appropriate to use the data contained therein to apply the narrative Tastes and Odors water quality objective. Concentrations that exceed this value can impair the municipal or domestic use of the resource by causing adverse odors. The applicable water quality objective to protect the municipal and domestic use from discharges of odor producing substances is the narrative Tastes and Odors objective, which is applied following the "Policy of Application of Water Quality Objectives" in the Basin Plan. A numerical groundwater limitation of 1.5 mg/L for ammonia (as NH<sub>4</sub>), based on Amoores and Hautala, is relevant and appropriate to apply the narrative Tastes and Odors objective to protect the municipal and domestic use of groundwater.
7. Groundwater limitations are required to protect the beneficial uses of the underlying groundwater.

## VI. RATIONALE FOR PROVISIONS

### A. Standard Provisions

Standard Provisions, which apply to all NPDES permits in accordance with 40 C.F.R. section 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 C.F.R. section 122.42, are provided in Attachment D. The discharger must comply with all standard provisions and with those additional conditions that are applicable under section 122.42.

Sections 122.41(a)(1) and (b) through (n) of 40 C.F.R. establish conditions that apply to all state-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the Order. Section 123.25(a)(12) of 40 C.F.R. allows the state to omit or modify conditions to impose more stringent requirements. In accordance with 40 C.F.R. section 123.25, this Order omits federal conditions that address enforcement authority specified in 40 C.F.R. sections 122.41(j)(5) and (k)(2) because the enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference Water Code section 13387(e).

### B. Special Provisions

#### 1. Reopener Provisions

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<sup>14</sup> Amoores, J.E. and E. Hautala, Odor as an Aid to Chemical Safety: Odor Thresholds Compared with Threshold Limit Values and Volatilities for 214 Industrial Chemicals in Air and Water Dilution, Journal of Applied Toxicology, Vol. 3, No. 6, (1983).

- a. **Whole Effluent Toxicity.** This Order requires the Discharger to investigate the causes of, and identify corrective actions to reduce or eliminate effluent toxicity through a site-specific Toxicity Reduction Evaluation (TRE) or, under certain circumstances, may be allowed to participate in an approved Toxicity Evaluation Study (TES) in lieu of conducting a site-specific TRE. This Order may be reopened to include a new chronic toxicity limitation, a new acute toxicity limitation, and/or a limitation for a specific toxicant identified in the TRE and/or TES.
- b. **Water Effects Ratio (WER) and Metal Translators.** A default WER of 1.0 has been used in this Order for calculating CTR criteria for applicable priority pollutant inorganic constituents. A WER of 7.55 has been used in this Order for calculating CTR criteria of copper. In addition, default dissolved-to-total metal translators have been used to convert water quality objectives from dissolved to total recoverable when developing effluent limitations for metals. If the Discharger performs studies to determine site-specific WERs and/or site-specific dissolved-to-total metal translators, this Order may be reopened to modify the effluent limitations for the applicable inorganic constituents.

## 2. Special Studies and Additional Monitoring Requirements

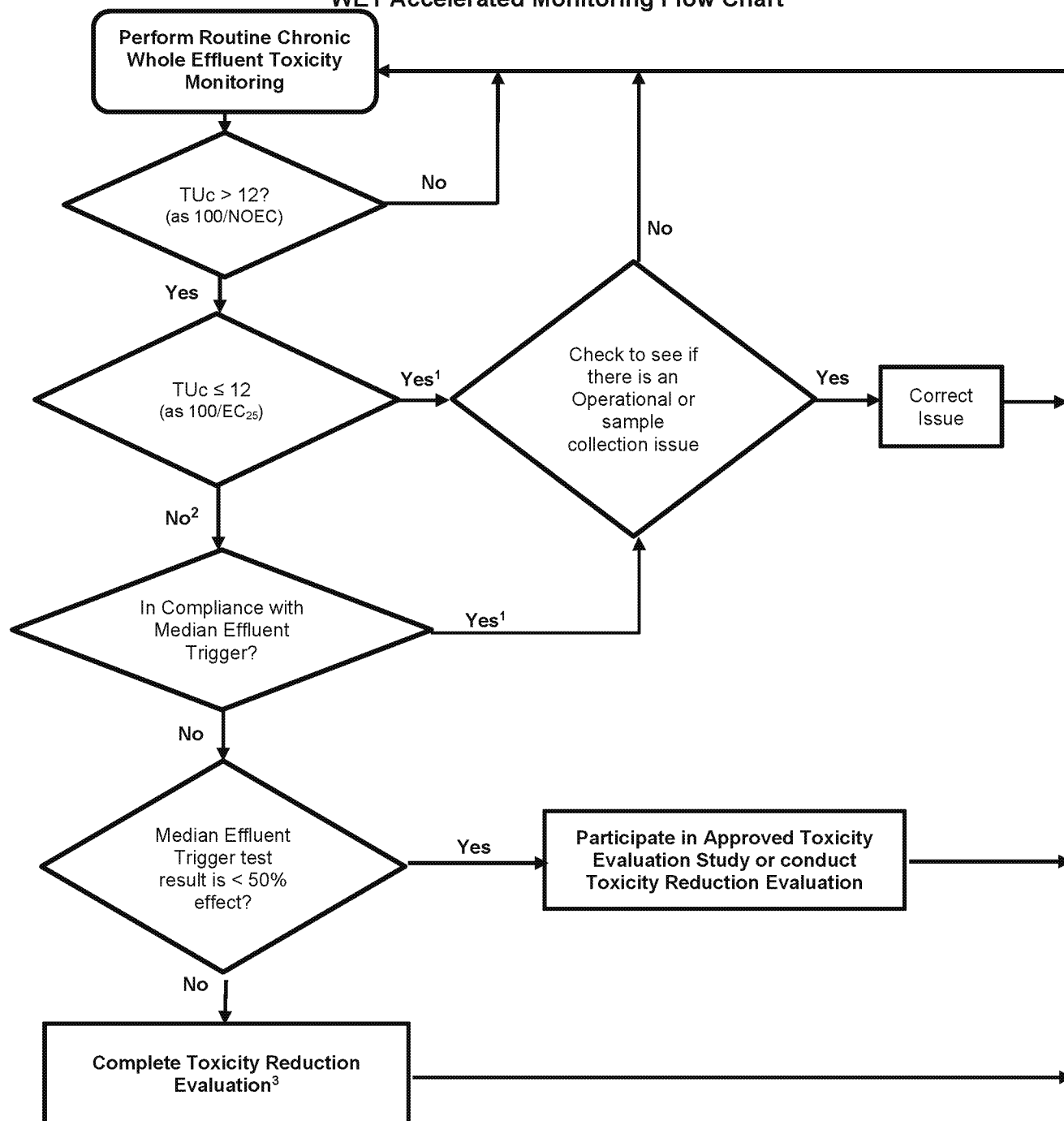
- a. **Chronic Whole Effluent Toxicity Requirements.** The Basin Plan contains a narrative toxicity objective that states, “*All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life.*” (Basin Plan at page III-8.00). Based on whole effluent chronic toxicity testing performed by the Discharger from December 2014 through January 2018, the discharge does not have reasonable potential to cause or contribute to an in-stream excursion above of the Basin Plan’s narrative toxicity objective.

The Monitoring and Reporting Program of this Order requires chronic WET monitoring to demonstrate compliance with the Basin Plan’s narrative toxicity objective. If the discharge exceeds the chronic toxicity monitoring trigger this provision requires the Discharger either participate in an approved Toxicity Evaluation Study (TES) or conduct a site-specific Toxicity Reduction Evaluation (TRE).

A TES may be conducted in lieu of a TRE if the percent effect is less than 50%. Determining the cause of toxicity can be challenging when the toxicity signal is low. Several Central Valley facilities with similar treatment systems have been experiencing intermittent low level toxicity. The dischargers have not been successful identifying the cause of the toxicity because of the low toxicity signal and the intermittent nature of the toxicity. Due to these challenges, the Central Valley Clean Water Association (CVCWA), in collaboration with staff from the Central Valley Water Board, has initiated a Special Study to Investigate Low Level Toxicity Indications (Group Toxicity Study). This Order allows the Discharger to participate in an approved TES, which may be conducted individually or as part of a coordinated group effort with other similar dischargers that are exhibiting toxicity. Although the current CVCWA Group Toxicity Study is related to low-level toxicity, participation in an approved TES is not limited to only low-level toxicity issues.

See the WET Monitoring Flow Chart (Figure F-2), below, for further clarification of the decision points for determining the need for TES/TRE initiation.

Figure F-2  
WET Accelerated Monitoring Flow Chart



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<sup>1</sup> The Discharger may participate in an approved TES if the discharge has exceeded the chronic toxicity monitoring trigger twice or more in the past 12 month period and the cause is not identified and/or addressed.

<sup>2</sup> The Discharger may elect to take additional samples to determine the 3 sample median. The samples shall be collected at least one week apart and the final sample shall be within 6 weeks of the initial sample exhibiting toxicity.

<sup>3</sup> The Discharger may participate in an approved TES instead of a TRE if the Discharger has conducted a TRE within the past 12 months and has been unsuccessful in identifying the toxicant.

**3. Best Management Practices and Pollution Prevention**

- a. **Salinity Evaluation and Minimization Plan.** An Evaluation and Minimization Plan for salinity is required to be maintained in this Order to ensure adequate measures are developed and implemented by the Discharger to reduce the discharge of salinity to the North Fork Calaveras River.
- b. **Mercury Pollution Prevention Plan.** This Order requires the Discharger to maintain the previously developed and Pollution Prevention Plan for mercury that was accepted by the Central Valley Water Board. The North Fork Calaveras River, to which the Facility discharges treated wastewater, is not listed on the 303(d) list for impaired water bodies. However, the North Fork Calaveras River is tributary to the New Hogan Reservoir, which is listed on the 303(d) list for mercury. A TMDL for mercury in New Hogan Reservoir is currently under development and is projected to be completed in 2021. The Pollution Prevention Plan for mercury is required to prevent possible further mercury loading in New Hogan Reservoir.

**4. Construction, Operation, and Maintenance Specifications**

- a. The operation and maintenance specifications for Storage Pond D are necessary to protect the beneficial uses of the groundwater. The specifications included in this Order are retained from Order R5-2014-0104-01. In addition, reporting requirements related to use of Storage Pond D are required to monitor its use and the potential impact on groundwater.

**5. Special Provisions for Publicly-Owned Treatment Works (POTWs)**

- b. **Collection System.** The State Water Board issued General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order 2006-0003-DWQ (General Order) on 2 May 2006. The State Water Board amended the Monitoring and Reporting Program for the General Order through Order WQ 2013-0058-EXEC on 6 August 2013. The General Order requires public agencies that own or operate sanitary sewer systems with greater than one mile of pipes or sewer lines to enroll for coverage under the General Order. The General Order requires agencies to develop sanitary sewer management plans (SSMPs) and report all sanitary sewer overflows (SSOs), among other requirements and prohibitions.

The General Order contains requirements for operation and maintenance of collection systems and for reporting and mitigating sanitary sewer overflows that are more extensive, and therefore, more stringent than the requirements under federal standard provisions. The Discharger and public agencies that are discharging wastewater into the facility's collection system were required to obtain enrollment for regulation under the General Order by 1 December 2006.

- c. **Sludge/Biosolids Treatment or Discharge Specifications.** Sludge in this Order means the solid, semisolid, and liquid residues removed during primary, secondary, or advanced wastewater treatment processes. Solid waste refers to grit and screening material generated during preliminary treatment. Residual sludge means sludge that will not be subject to further treatment at the wastewater treatment plant. Biosolids refer to sludge that has been treated and tested and shown to be capable of being beneficially and legally used pursuant to federal and state regulations as a soil amendment for agricultural, silvicultural, horticultural, and land reclamation activities as specified under 40 C.F.R. part 503. This Order does not regulate offsite

use or disposal of biosolids, which are regulated instead under 40 C.F.R. part 503; administered by U.S. EPA. The Sludge/Biosolids Treatment or Discharge Specifications in this Order implement the California Water Code to ensure sludge/biosolids are properly handled onsite to prevent nuisance, protect public health, and protect groundwater quality.

**6. Other Special Provisions - Not Applicable**

**7. Compliance Schedules - Not Applicable**

**VII. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS**

CWA section 308 and 40 C.F.R. sections 122.41(h), (j)-(l), 122.44(i), and 122.48 require that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Central Valley Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. The Monitoring and Reporting Program (MRP), Attachment E of this Order establishes monitoring, reporting, and recordkeeping requirements that implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this facility.

**A. Influent Monitoring**

1. Influent monitoring is required to collect data on the characteristics of the wastewater and to assess compliance with effluent limitations (e.g., BOD<sub>5</sub> and TSS reduction requirements). the monitoring frequencies for flow (continuous), BOD<sub>5</sub> and TSS (1/week), and electrical conductivity and TDS (1/quarter) have been retained from Order R5-2014-0104-01.

**B. Effluent Monitoring**

1. Pursuant to the requirements of 40 C.F.R. section 122.44(i)(2) effluent monitoring is required for all constituents with effluent limitations. Effluent monitoring is necessary to assess compliance with effluent limitations, assess the effectiveness of the treatment process, and to assess the impacts of the discharge on the receiving stream and groundwater.
2. Effluent monitoring frequencies and sample types for ammonia (1/week), BOD<sub>5</sub> (1/week), chlorine residual (continuous), electrical conductivity (1/week), cyanide (1/month), flow (continuous), hardness (1/month), pH (1/week), total coliform organisms (1/week), TDS (1/month), temperature (1/week) and TSS (1/week) have been retained from Order R5-2014-0104-01 to determine compliance with effluent limitations for these parameters.
3. Water Code section 13176, subdivision (a), states: "*The analysis of any material required by [Water Code sections 13000-16104] shall be performed by a laboratory that has accreditation or certification pursuant to Article 3 (commencing with Section 100825) of Chapter 4 of Part 1 of Division 101 of the Health and Safety Code.*" The DDW accredits laboratories through its Environmental Laboratory Accreditation Program (ELAP).

Section 13176 cannot be interpreted in a manner that would violate federal holding time requirements that apply to NPDES permits pursuant to the CWA. (Wat. Code §§ 13370, subd. (c), 13372, 13377.) Section 13176 is inapplicable to NPDES permits to the extent it is inconsistent with CWA requirements. (Wat. Code § 13372, subd. (a).) The holding time requirements are 15 minutes for chlorine residual, dissolved oxygen, and pH, and immediate analysis is required for temperature. (40 C.F.R. § 136.3(e), Table II) Due to the location of the Facility, it is both legally and factually impossible for the Discharger to comply with section 13176 for constituents with short holding times.

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**C. Whole Effluent Toxicity Testing Requirements**

1. **Acute Toxicity.** Semiannual 96-hour bioassay testing is required to demonstrate compliance with the effluent limitation for acute toxicity.
2. **Chronic Toxicity.** Annual chronic whole effluent toxicity testing is required in order to demonstrate compliance with the Basin Plan's narrative toxicity objective.

**D. Receiving Water Monitoring**

**1. Surface Water**

- a. Receiving water monitoring is necessary to assess compliance with receiving water limitations and to assess the impacts of the discharge on the receiving stream.

**2. Groundwater**

- a. Water Code section 13267 states, in part, "(a) A *Regional Water Board, in establishing...waste discharge requirements... may investigate the quality of any waters of the state within its region*" and "(b) (1) *In conducting an investigation..., the Regional Water Board may require that any person who... discharges... waste...that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the Regional Water Board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports.*" The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, a Regional Water Board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports. The Monitoring and Reporting Program is issued pursuant to Water Code section 13267. The groundwater monitoring and reporting program required by this Order and the Monitoring and Reporting Program are necessary to assure compliance with these waste discharge requirements. The Discharger is responsible for the discharges of waste at the facility subject to this Order.
- b. Monitoring of the groundwater must be conducted to determine if the discharge has caused an increase in constituent concentrations, when compared to background. The monitoring must, at a minimum, require a complete assessment of groundwater impacts including the vertical and lateral extent of degradation, an assessment of all wastewater-related constituents which may have migrated to groundwater, an analysis of whether additional or different methods of treatment or control of the discharge are necessary to provide best practicable treatment or control to comply with the State Anti-Degradation Policy. Economic analysis is only one of many factors considered in determining best practicable treatment or control. If monitoring indicates that the discharge has incrementally increased constituent concentrations in groundwater above background, this permit may be reopened and modified. Until groundwater monitoring is sufficient, this Order contains Groundwater Limitations that allow groundwater quality to be degraded for certain constituents when compared to background groundwater quality, but not to exceed water quality objectives. If groundwater quality has been degraded by the discharge, the incremental change in pollutant concentration (when compared with background) may not be increased. If groundwater quality has been or may be degraded by the discharge, this Order may be reopened and specific numeric limitations established consistent with the State Anti-Degradation Policy and the Basin Plan.

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- c. This Order requires the Discharger to continue groundwater monitoring and includes a regular schedule of groundwater monitoring in the attached Monitoring and Reporting Program. The groundwater monitoring reports are necessary to evaluate impacts to waters of the State to assure protection of beneficial uses and compliance with Central Valley Water Board plans and policies, including the State Anti-Degradation Policy. Evidence in the record includes effluent monitoring data that indicates the presence of constituents that may degrade groundwater and surface water.

#### **E. Other Monitoring Requirements**

##### **1. Biosolids Monitoring – Not Applicable**

Biosolids disposal requirements are imposed pursuant to 40 CFR Part 503 to protect public health and prevent groundwater degradation. Biosolids monitoring for compliance with 40 C.F.R. part 503 regulations is not included in this Order since it is a program administered by U.S. EPA's part 503 biosolids program:

<https://www.epa.gov/biosolids/compliance-and-annual-reporting-guidance-about-clean-water-act-laws>

##### **2. Water Supply Monitoring**

Water supply monitoring is required to evaluate the source of constituents in the wastewater.

##### **3. Pond Monitoring**

Treatment pond monitoring is required to ensure proper operation of the storage pond. Monitoring for freeboard (weekly), pH (monthly), and dissolved oxygen (monthly) to evaluate compliance with land discharge specifications; quarterly monitoring for electrical conductivity, total nitrogen, and total dissolved solids; and annual monitoring for standard minerals have been retained from Order R5-2014-0104-01 to evaluate impacts to groundwater from the pond.

##### **4. Land Discharge Monitoring**

Land discharge monitoring is required to ensure that the discharge to the land disposal area complies with the Storage Pond and Land Disposal Operating Requirements in section VI.C.4 of this Order. Monitoring frequencies and sample types for flow (continuous), flow to spray fields (daily), BOD<sub>5</sub> (weekly), electrical conductivity (weekly), total coliform organisms (weekly), and total nitrogen (monthly) have been retained from Order R5-2014-0104-01.

#### **VIII. PUBLIC PARTICIPATION**

The Central Valley Water Board has considered the issuance of WDR's that will serve as an NPDES permit for San Andreas Sanitary District Wastewater Treatment Plant. As a step in the WDR adoption process, the Central Valley Water Board staff has developed tentative WDR's and has encouraged public participation in the WDR adoption process.

##### **A. Notification of Interested Parties**

The Central Valley Water Board notified the Discharger and interested agencies and persons of its intent to prescribe WDR's for the discharge and provided an opportunity to submit written comments and recommendations. Notification was provided through the following <Describe Notification Process (e.g., newspaper name and date)>

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The public had access to the agenda and any changes in dates and locations through the Central Valley Water Board's website at:  
[http://www.waterboards.ca.gov/centralvalley/board\\_info/meetings/](http://www.waterboards.ca.gov/centralvalley/board_info/meetings/)

**B. Written Comments**

Interested persons were invited to submit written comments concerning tentative WDR's as provided through the notification process. Comments were due either in person or by mail to the Executive Office at the Central Valley Water Board at the address on the cover page of this Order.

To be fully responded to by staff and considered by the Central Valley Water Board, the written comments were due at the Central Valley Water Board office by 5:00 p.m. on <Date>.

**C. Public Hearing**

The Central Valley Water Board held a public hearing on the tentative WDR's during its regular Board meeting on the following date and time and at the following location:

Date: 4/5 October 2018  
Time: 8:30 a.m.  
Location: Redding City Hall  
777 Cypress Avenue  
Redding, CA 96001

Interested persons were invited to attend. At the public hearing, the Central Valley Water Board heard testimony pertinent to the discharge, WDR's, and permit. For accuracy of the record, important testimony was requested in writing.

**D. Reconsideration of Waste Discharge Requirements**

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., within 30 calendar days of the date of adoption of this Order at the following address, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day:

State Water Resources Control Board  
Office of Chief Counsel  
P.O. Box 100, 1001 I Street  
Sacramento, CA 95812-0100

Or by email at [waterqualitypetitions@waterboards.ca.gov](mailto:waterqualitypetitions@waterboards.ca.gov)

For instructions on how to file a petition for review, see  
[http://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality/wqpetition\\_instr.shtml](http://www.waterboards.ca.gov/public_notices/petitions/water_quality/wqpetition_instr.shtml)

**E. Information and Copying**

The Report of Waste Discharge, other supporting documents, and comments received are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Central Valley Water Board by calling (916) 464-3291.

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**F. Register of Interested Persons**

Any person interested in being placed on the mailing list for information regarding the WDR's and NPDES permit should contact the Central Valley Water Board, reference this facility, and provide a name, address, and phone number.

**G. Additional Information**

Requests for additional information or questions regarding this order should be directed to Mr. Tyson Pelkofer at 916-464-4853.

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ATTACHMENT G – SUMMARY OF REASONABLE POTENTIAL ANALYSIS

| Constituent | Units | MEC  | B                | C   | CMC  | CCC  | Water & Org | Org. Only | Basin Plan | MCL | Reasonable Potential |
|-------------|-------|------|------------------|-----|------|------|-------------|-----------|------------|-----|----------------------|
| Ammonia     | mg/L  | 3.2  | 0.06             |     | 2.14 | 2.28 | --          | --        | --         | --  | YES                  |
| Cyanide     | ug/L  | 12.0 | 1.0 <sup>1</sup> | 5.2 | 22   | 5.2  | 700         | 220,000   | --         | --  | YES                  |

General Note: All inorganic concentrations are given as a total recoverable.

MEC = Maximum Effluent Concentration

B = Maximum Receiving Water Concentration or lowest detection level, if non-detect

C = Criterion used for Reasonable Potential Analysis

CMC = Criterion Maximum Concentration (CTR or NTR)

CCC = Criterion Continuous Concentration (CTR or NTR)

Water & Org = Human Health Criterion for Consumption of Water & Organisms (CTR or NTR)

Org. Only = Human Health Criterion for Consumption of Organisms Only (CTR or NTR)

Basin Plan = Numeric Site-specific Basin Plan Water Quality Objective

MCL = Drinking Water Standards Maximum Contaminant Level

NA = Not Available

ND = Non-detect

Footnotes:

(1) Background samples taken during Effluent and Receiving Water Characterization Study from Order R5-2014-0104-01 and sampled between February 2012 and April 2012.

(2)

ATTACHMENT H – CALCULATION OF WQBEL'S

| Aquatic Life WQBEL's Calculations |       |          |      |      |                   |                  |     |                                 |                      |                                   |                        |                               |                 |                               |                            |                   |                   |
|-----------------------------------|-------|----------|------|------|-------------------|------------------|-----|---------------------------------|----------------------|-----------------------------------|------------------------|-------------------------------|-----------------|-------------------------------|----------------------------|-------------------|-------------------|
| Parameter                         | Units | Criteria |      | B    | CV Eff            | Dilution Factors |     | Aquatic Life Calculations       |                      |                                   |                        |                               |                 |                               | Final Effluent Limitations |                   |                   |
|                                   |       | CMC      | CCC  |      |                   | CMC              | CCC | ECA Multiplier <sub>acute</sub> | LTA <sub>acute</sub> | ECA Multiplier <sub>chronic</sub> | LTA <sub>chronic</sub> | AMEL Multiplier <sub>95</sub> | AWEL Multiplier | MDEL Multiplier <sub>99</sub> | AMEL <sup>1</sup>          | AWEL <sup>2</sup> | MDEL <sup>3</sup> |
| Ammonia Nitrogen, Total (as N)    | mg/L  | 5.62     | 2.28 | 0.06 | — <sup>4</sup>    | 6                | 6   | 0.14                            | 0.3                  | 0.54                              | 1.22                   | 2.48                          | 5.36            | 7.28                          | 5.1                        | 11.0              | —                 |
| Cyanide                           | µg/L  | 22       | 5.2  | 1.0  | 0.52 <sup>4</sup> | 6                | 6   | 0.33                            | 49.1                 | 0.54                              | 15.8                   | 1.52                          | 2.59            | 2.99                          | 24                         | —                 | 47                |

<sup>1</sup> Average Monthly Effluent Limitations are calculated according to Section 1.4 of the SIP using a 95<sup>th</sup> percentile occurrence probability.

<sup>2</sup> Average Weekly Effluent Limitations are calculated according to Section 1.4 of the SIP using a 98<sup>th</sup> percentile occurrence probability.

<sup>3</sup> Maximum Daily Effluent Limitations are calculated according to Section 1.4 of the SIP using a 99<sup>th</sup> percentile occurrence probability.

<sup>4</sup> Coefficient of Variation (CV) was established in accordance with section 1.4 of the SIP.